IS FPA RECORDS CENTER REGION 5.



Monthly Oversight Report 46
ACS NPL Site
Griffith, Indiana
September 25, 2004 - October 29, 2004



101 N. Wacker Drive

Black & Veatch Special Projects Corp.

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USEPA/RAC VII American Chemical Services RAO (057-ROBF-05J7) BVSPC Project 46526 BVSPC File C.3 November 15, 2004

Mr. Kevin Adler U.S. Environmental Protection Agency 77 W. Jackson Boulevard (SR-6J) Chicago, Illinois 60604-3590

Subject:

Monthly Oversight Summary Report

No. 46 for October 2004

Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 46 for October 2004 for the American Chemical Services Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email (campbelllm@bv.com).

Sincerely,

BLACK & VEATCH Special Projects Corp.

Larry M. Campbell, P.E.

Site Manager

Enclosure

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Monthly Oversight Summary Report No. 46 ACS Superfund Site WA57, 46526.238

Reporting Period: Month of October (September 25, 2004 - October 29, 2004). **BVSPC O/S Dates:** September 28 and October 7, 14, 20, 25, and 27, 2004.

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	5	Respondent's General Contractor
U.S. Environmental Protection Agency	1	Federal Regulatory Agency
Indiana Department of Environmental Management	2	State Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
PSA Environmental	2	Chemical Oxidation Geoprobe Contractor
ISOTEC	4	Chemical Oxidation Injection Contractor
Walsh & Kelly	4	SBPA Asphalt Paving Contractor
Austgen	2	General Contractor
Ryan Construction	2	Mechanical Contractor
Microbac (formerly Simalabs)	1	GWTP Sampling Contractor
Post Tribune	2	Newspaper Reporter and Photographer
General Public	8	Interested Persons

Construction Activities

Major Activities:

- Montgomery Watson Harza continued to operate the groundwater treatment plant and the in-situ soil vapor extraction systems.
- ISOTEC and PSA Environmental completed the first phase of the chemical oxidation injections of modified Fenton's reagent in the South Area smear zone plume and demobilized.

- Walsh & Kelly filled joints between the final asphalt cover and concrete pads, constructed asphalt curbs to direct stormwater to drains, and painted stripping to delineate the roadway across the Still Bottoms Pond Area final cover.
- Ryan and Austgen made piping modifications and electrical/control connections between the new auxiliary and the existing Off-Site Containment Area blower systems.
- Montgomery Watson Harza completed the third-quarter semiannual groundwater monitoring well sampling and the annual residential well sampling.
- Montgomery Watson Harza and PSA Environmental conducted past-application sampling in the chemox treatment area.
- Microbac (formerly Simalabs) collected samples from the groundwater treatment plant for routine process monitoring.
- Montgomery Watson Harza held construction coordination meetings at the site on October 7 and 28, 2004.
- U.S. Environmental Protection Agency and Montgomery Watson Harza conducted a public meeting on October 20 at the site to celebrate the completion of construction of the elements of the remedial action.

Activities Performed:

Montgomery Watson Harza (MWH) continued to operate the groundwater treatment plant (GWTP) during the reporting period at 25 to 27 gpm. The GWTP was shut down for isolated periods for routine maintenance and to replace the granular activated carbon on September 27. The GWTP operated in recirculation mode until it was brought back online on September 29. Because of problems with the pump controllers, groundwater was not being pumped and treated from extraction wells MW10C and MW56 during the early part of the reporting period. Pump controllers were removed for inspection and repair/replacement. The controller for the pump from MW56 was repaired, and pumping from MW56 was resumed on October 15. Microbac (formerly Simalabs) collected samples from the GWTP for routine process monitoring.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizer 2 (thermox 2). The OFCA ISVE system operated with the same 14 SVE wells that have been used for the last few months. The ONCA SBPA ISVE system operated with 12 SVE wells, but MWH is operating with a different group of 12 wells that may produce more vapors that the previous group. The OFCA ISVE system was offline for substantial periods during the reporting period while Ryan and Austgen, respectively, made piping and electrical/control connections for the new OFCA ISVE system auxiliary blower. Austgen is awaiting arrival of explosion proof relays for the OFCA auxiliary blower, which is approximately 99% complete. MWH plans to conduct startup testing of the auxiliary blower system as soon as the relays are installed.

Thermox 2 was shut down on October 4 when MWH installed new packing material to replace the previously damaged packing that was removed after the acid washing on September 14. Thermox 2 was returned to operation on October 5 and ran well during the remainder of the reporting period.

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Austgen continued checkout of the new heat exchanger for thermox 1, including modifications to the software code. Final vapor piping and control wiring for thermox 1 were completed, and MWH began startup procedures on October 5, gradually raising the temperature to 1500°F. MWH introduced clean air on October 8 and OFCA ISVE vapors on October 13. Intermittently, thermox 1 failed to operate because of flame failures. MWH reported that it will document the changes to thermox 1 in the next *Quarterly Report of Active Treatment Systems* and will update the *O&M Manual* for thermox 1.

Ryan and Austgen were onsite October 14 to modify the ISVE influent piping in the GWTP such that vapors from the ONCA SBPA ISVE system could be directed to thermox 1, thereby freeing up capacity in thermox 2 to process the additional OFCA ISVE system vapor flow to be generated by the new OFCA auxiliary blower.

Walsh & Kelly (W&K) was onsite on October 6 to fill the joints between the SBPA final asphalt cover and the concrete well pads and building foundations. W&K was also onsite on October 8 to place asphalt to dress up the edges of the final cover and to install asphalt curbs along the perimeter of the cover to control and direct surface water flow to storm drains. MWH reported that this work was completed under rainy conditions, and at some locations, the back of the asphalt curb crumbled and lost shape. W&K was onsite on October 21 to paint stripes to delineate the roadway area (for heavy trucks) across the SBPA final cover. MWH reported that it is evaluating methods to delineate the roadway area that will be visible when the ground is snow covered.

ISOTEC and PSA Environmental completed the chemical oxidation injections in the South Area smear zone plume near the intersection of Reder Road and Colfax Avenue. ISOTEC had set up equipment in the OFCA and completed the injections on September 25. A total of 17 injection points were completed during this period, bringing the total to 388, eight more than originally scheduled. ISOTEC continued using three pumps and mixing tanks to inject the modified Fenton's reagent. ISOTEC and PSA demobilized from the site on September 25. ISOTEC's hydrogen peroxide tank trailer was demobilized on October 7. MWH reported that it will restore damaged surface areas in the chemox treatment area, including the Colfax Avenue right of way. MWH repaired damage to the grass at 1002 Reder Road.

MWH completed the third-quarter semiannual groundwater monitoring well sampling on September 25. MWH conducted the annual residential well sampling from September 25 through September 28. The well at residence PW-B was not sampled because the spigot had been taped shut. MWH attempts to contact the resident were not successful. MWH sampled another residence (PW-R) at the request of the resident.

MWH reported that it had received the analytical results from the soil gas samples collected during the previous reporting period near the house at 1002 Reder Road. These results indicated a possible leak in the natural gas piping leading to the house. MWH notified the local gas utility that confirmed the leak and replaced a valve. MWH reported that it had recommended to the PRP group that additional soil gas sampling be conducted in this area.

Observed MWH conducting groundwater sampling of existing piezometers and temporary wells in the chemox treatment area on October 25. PSA Environmental mobilized to the site on October 26. MWH reported that it and PSA collected groundwater samples at additional locations in the chemox injection area

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on October 26. Observed MWH and PSA collect soil samples at additional locations on October 27. PSA demobilized from the site on October 27.

MWH and U.S. Environmental Protection Agency conducted a public meeting at the site on October 20 from 3 to 5 PM to celebrate completion of construction of the physical elements of the remedial action. Members of the general public and newspaper media met at the Griffith City Hall and were transported by bus to the GWTP at the ACS site. Kevin Adler (EPA) and Peter Vagt (MWH) presented a summary of the ACS site history and described the resulting contamination at the site and the remedial actions constructed and implemented to cleanup such contamination. The public was given a descriptive tour of the GWTP and the wetlands pond and was then transported via bus to the OFCA to view the OFCA ISVE blower shed. At the conclusion of the meeting, the public was transported back to City Hall.

MWH held two construction coordination meetings on October 7 and 28, 2004. The former was held at the site, but the latter was held via telephone.

Attached are Black & Veatch Special Projects Corp. (BVSPC) weekly reports No. 187 through 191, correspondence, log book notes, and photographs of the daily activities. BVSPC's crew conducted oversight of the major field activities on portions of 6 days (September 28 and October 7, 14, 20, 25, and 27, 2004) and attended the public meeting on October 20, 2004. BVSPC's crew attended two construction coordination meetings on October 7 and 28, 2004, both via telephone.

Topics of Concern: None

Concern Resolution: None

Upcoming Activities:

- MWH to complete expansion and start the OFCA ISVE auxiliary blower system.
- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area (to begin on November 1).
- MWH to contact local resident regarding "whining" noise from the treatment system.

Signature:	Larry Campbell	Date:	November 12, 2004
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Weekly Oversight Summary Report No. 187 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of September 27, 2004.

BVSPC O/S Dates: September 28, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	4	Respondent's General Contractor
Black & Veatch Special Projects Corp.	ı	USEPA Oversight Contractor
PSA Environmental	2	Chemical Oxidation Geoprobe Contractor
ISOTEC	4	Chemical Oxidation Injection Contractor
Ryan Construction	2	Mechanical Contractor
Austgen	3	General Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Montgomery Watson Harza replaced the granular activated carbon in the groundwater treatment plant.
- ISOTEC and PSA Environmental completed chemical oxidation injections of modified Fenton's reagent in the South Area smear zone plume area and demobilized.
- Montgomery Watson Harza completed the third-quarter semiannual groundwater monitoring well sampling and conducted the annual residential well sampling.
- Montgomery Watson Harza completed third quarter monitoring well and annual residential well sampling.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 25-27 gpm. The GWTP was shut down periodically for routine maintenance and to replace the granular activated carbon (GAC) on September 27. The GWTP operated in recirculation mode until it was brought back online on September 29. Because of problems with the pump controllers, groundwater is not currently being pumped and treated from extraction wells MW10C and MW56. The pump controllers have been removed for inspection and repair/replacement.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors

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through thermal oxidizer 2 (thermox 2). Ryan and Austgen continued installation and checkout of the new heat exchanger for thermox 1. Final vapor piping and control wiring should be completed next week and operations will begin to restart thermox 1.

The OFCA ISVE system continues to operate with 14 wells. Austgen continued electrical and control wiring of the OFCA auxiliary blower, which is approximately 95% complete. The ONCA SBPA ISVE system continues to operate with a different group of 12 wells that may produce more vapors than the previous group.

MWH plans to make additional changes to the SBPA final cover, including placing asphalt to dress up the edges of the cover, installing asphalt curbs to control and direct surface water flow to storm drains, complete the fencing around the ISVE wells, and paint stripes to delineate the roadway area (for heavy trucks) across the SBPA final cover.

ISOTEC and PSA Environmental completed the chemical oxidation injections in the South Area smear zone plume near the intersection of Reder Road and Colfax Avenue. ISOTEC had set up equipment in the OFCA and completed the injections on September 25. A total of 17 injection points were completed during this period, bringing the total to 388, eight more than originally scheduled. ISOTEC continued using three pumps and mixing tanks to inject the modified Fenton's reagent. ISOTEC and PSA demobilized from the site on September 25. MWH repaired damage to the grass at 1002 Reder Road.

MWH completed the third-quarter semiannual groundwater monitoring well sampling on September 25. MWH conducted the annual residential well sampling from September 25 through September 28. The well at residence PW-B was not sampled because the spigot had been taped shut. MWH attempts to contact the resident were not successful. MWH sampled another residence (PW-R) at the request of the resident.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to complete installation of the new heat exchanger and start thermox 1.
- MWH to complete expansion and start the OFCA ISVE auxiliary blower system.
- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete remaining elements (curbs, fence, stripping) of the SBPA final cover.
- MWH to evaluate soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to conduct past-application sampling of soil and groundwater in the offsite chemox treatment area.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area (to begin on November 1).
- MWH to contact local resident regarding "whining" noise from the treatment system.

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•	EPA and MWH to conduct public mee 20.	ing regarding construction con	npletion on October
Signature:	Larry Campbell	Date: October 6	5, 2004
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Weekly Oversight Summary Report No. 188 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of October 4. 2004.

BVSPC O/S Dates: October 7, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Walsh & Kelly	6	Asphalt Paving Contractor
Austgen	4	General Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Montgomery Watson Harza began startup of thermal oxidizer 1.
- Walsh & Kelly filled joints between asphalt and concrete pads and constructed asphalt curbs to direct stormwater runoff to the drains.
- Montgomery Watson Harza identified a possible natural gas leak at the residence at 1002
 Reder Road based on soil gas sampling results. Gas utility repaired leak.
- Montgomery Watson Harza conducted the construction coordination meeting at the site on October 7.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. The GWTP was shut down periodically for routine maintenance. Because of problems with the pump controllers, groundwater is not currently being pumped and treated from extraction wells MW10C and MW56. The pump controllers have been removed for inspection and repair/replacement.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizer 2 (thermox 2). New packing material was installed in thermox 2 on October 4 to replace the previously damaged packing that was removed after the acid washing on September 14. Thermox 2 was returned to operation on October 5 and has been running well.

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Austgen continued checkout of the new heat exchanger for thermox 1, including modifications to the software code. Final vapor piping and control wiring for thermox 1 are complete, and MWH began startup procedures on October 5, gradually raising the temperature to 1500°F. MWH introduced clean air to thermox 1 on October 8. The following week, MWH plans to introduce ISVE vapors to thermox 1. MWH reported that it will document the changes to thermox 1 in the next *Quarterly Report of Active Treatment Systems* and will update the *O&M Manual* for thermox 1.

The OFCA ISVE system continues to operate with 14 wells. Austgen continued electrical and control wiring of the OFCA auxiliary blower, which is approximately 99% complete. Expected completion date is October 11. MWH will then conduct startup testing of the auxiliary blower system. The ONCA SBPA ISVE system continues to operate with a different group of 12 wells that may produce more vapors than the previous group.

Walsh & Kelly (W&K) was onsite on October 6 to fill the joints between the SBPA final asphalt cover and the concrete well pads and building foundations. W&K was also onsite on October 8 to place asphalt to dress up the edges of the final cover and to install asphalt curbs along the perimeter of the cover to control and direct surface water flow to storm drains. MWH reported that this work was completed under rainy conditions, and at some locations, the back of the asphalt curb crumbled and lost shape. MWH plans to complete the fencing around the ISVE wells and to paint stripes to delineate the roadway area (for heavy trucks) across the SBPA final cover. MWH reported that it is evaluating methods to delineate the roadway area that will be visible when the ground is snow covered.

ISOTEC's hydrogen peroxide tank trailer was demobilized on October 7. MWH reported that it will restore damaged surface areas in the chemox treatment area, including the Colfax Avenue right of way.

MWH reported that it had received the analytical results from the soil gas samples collected near the house at 1002 Reder Road. These results indicated a possible leak in the natural gas piping leading to the house. MWH notified the local gas utility that confirmed the leak and replaced a valve. MWH reported that it had recommended to the PRP group that additional soil gas sampling be conducted in this area.

MWH conducted the construction coordination meeting at the site on October 7.

Black & Veatch Special Projects Corp. went to the site to attend MWH's construction coordination meeting on October 7, 2004, but had to complete the meeting via telephone because of a family medical emergency.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to complete startup of thermox 1.
- MWH to complete expansion and start the OFCA ISVE auxiliary blower system.
- MWH to continue proving out the ONCA SBPA ISVE system wells.

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- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing and stripping of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to conduct past-application sampling of soil and groundwater in the offsite chemox treatment area.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area (to begin on November 1).
- MWH to contact local resident regarding "whining" noise from the treatment system.
- EPA and MWH to conduct public meeting regarding construction completion on October 20.

Signature:	Larry Campbell	Date: October 13, 2004
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WEEKLY CONSTRUCTION MEETING MINUTES FOR OCTOBER 7, 2004 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEETING DATE:

Thursday, October 7, 2004

MEETING TIME:

10:00 AM

MEETING LOCATION: ACS

ATTENDEES:

Kevin Adler - U.S. EPA

Larry Campbell - BVSPC (via phone)

Peter Vagt - MWH
Rob Adams - MWH
Mark Travers - Environ
Lee Orosz - MWH
Rich McCarroll - MWH
Chad Smith - MWH
Amy Clore - MWH

TOFICS:

Health and Safety Summary

There have been no health and safety issues since the last meeting on September 23rd.

Ryan Construction, Augsten Electric, Walsh and Kelly, PSA and Isotech were all on site in the past two weeks. Workers involved with the granular activated carbon (GAC) change out in the grout dwater treatment plant (GWTP) were the appropriate personal protective equipment (PPE) including a harness, eye-protection and hard hats.

Groundwater Treatment Plant (GWTP) Status

The WWTP is presently operating at 27 gallons per minute (gpm). The GWTP was shut down September 27th while the GAC was exchanged. The system was operated in recirculation mode until September 28th to remove fines from the new GAC. The system was then brought back on line legan discharging on September 29th. No issues have arisen regarding the GWTP.

As ithitially discussed during September 23rd construction meeting the sulfuric acid stored in temporary storage tanks in the GWTP was shipped off-site September 20th. The temporary storage tanks were then cleaned and returned to the rental company on September 20th.

Off-Site Area/SBPA ISVE Systems

While Thermal Oxidizer/Scrubber Unit 2 (Therm Ox 2) underwent acid washing of the scrubber packing on September 14th it was noticed that portions of the packing material were damaged. Replicement packing was ordered and Therm Ox 2 was temporarily shut down on October 4th while the new packing was installed and other maintenance was performed. The unit was brought back online October 5th and is currently running normally.

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October 7, 2004 Meeting

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The mechanical work on the new heat exchanger for Thermal Oxidizer/Scrubber Unit 1 (Therm Ox 1) is complete. The system was started up on October 5th and given two days time for the temperature to rise to the operating temperature. The system is presently at the operating temperature of 1500 degrees Fahrenheit. MWH will test the unit today (October 7th) with fresh air. Testing with actual vapors is scheduled for October 8th after the replacement of a faulty conductivity probe. MWH will document the changes made to the Therm Ox units in its quarterly report and will also look into revising the O & M manual for the Therm Ox units for future reference.

The Off-Site ISVE system is currently running and Augsten is finalizing the electrical and control wiring for the ISVE expansion equipment. The electrical wiring is anticipated to be complete by October 11th MWH will conduct start-up testing of the blower system upgrades once the wiring is complete.

The Still Bottoms Pond Area (SBPA) IS VE system is currently running normally.

SBFA Final Cover

Walch and Kelly was on site October 6th filling in the joints on the SBPA Final Cover. Walsh and Kelly will also be on site October 8th to conduct additional work on the Cover. The work will include the installing 6-inch high storm water diversion curbs, installing asphalt around some peritheter catch basins, and delineating heavy traffic areas with solid yellow lines. MWH is evaluating methods that will enable the designated heavy traffic areas to be visible in the winter months when snow may be on the ground.

Chernical Oxidation Application

The first full scale Chem Ox application was completed on September 25th. A total of 388 injection points were completed. The subcontractors demobilized from the site on September 25th and the hydrogen peroxide tank was removed from the site October 7th. MWH will perform restoration work on the lawn of the residence at 1002 Reder Road, as well as the right of way along Colfax Avenue.

MWH received initial results of the soil gas samples taken near the resident at the intersection of Colfax and Reder Rd. MWH is evaluating the results and will include its findings in a future letter to the Agencies.

Post Chem Ox soil and groundwater sampling is scheduled for the last week of October. MWH will be sending out a letter showing the proposed locations to the Agencies during the week of October 11th.

Groundwater and Residential Well Sampling

The 24th round of Groundwater sampling was completed on September 28th along with the Residential well sampling MWH did not sample the groundwater at the residence of PW-B because the water spigot was taped shut and MWH was not able to get into contact with the resident. Attempts by MWH of contacting the residence have been unsuccessful. PW-B will not be included in this round of residential sampling. The U.S. EPA will send the resident a letter once the results from the other residential wells are received and validated. At request of the resident along the residential well as part of the sampling round. (This well had previously been sampled as part of an earlier investigation but is not one of the regularly sampled residential wells).

Construction Meeting Minutes

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ACS NPL Site

Lower Aquifer Investigation

Investigation of the lower aquifer is scheduled to begin on November 1st. The investigation is estimated to last two weeks. MWH will issue a final version of the work plan to the Agencies before work begins.

Construction Completion

The public meeting is scheduled for October 20th between 3 and 5 p.m. The community is being notified of the meeting by the U.S EPA through newspaper ads and contact through area schools. MWill is making arrangements for a shuttle bus to provide transportation for community members to transport them from the townhall to the ACS Site.

October 8, 2004 through October 21, 2004	Complete Off-Site ISVE system upgrades (during week of October 11) Begin test-out of the Off-Site ISVE system upgrades (during week of October 11) GWTP/BWES/PGCS operation and routine maintenance (on-going) Complete startup of the heat exchanger for Therm Ox 1 (during week of October 11) Complete SBPA Cover finishing work (TBD) Conduct Public Meeting (October 20) Lower Aquifer Investigation (November 1)
Health and Safety Items to Monitor	 Safety issues associated with the Off-Site ISVE system expansion. The system will be shut down while personnel work on the electrical portions of the blower building. Routine daily tailgate health and safety meetings for all work activities.

Next Construction Meeting - Thursday, October 21, 2004, 10 AM.

ALC/H AA/PJV

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Constituction Meeting Minutes
October 7, 2004 Meeting

October 12, 2004

ACS NPL Site

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Weekly Oversight Summary Report No. 189 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of October 11, 2004.

BVSPC O/S Dates: October 14, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Ryan	1	General Contractor
Austgen	2	General Contractor
Microbac	1	GWTP Sampling Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Montgomery Watson Harza began processing vapors from the in-situ soil vapor extraction systems through thermal oxidizer 1.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. The GWTP was shut down periodically for routine maintenance. Because of problems with the pump controllers, groundwater is not currently being pumped and treated from extraction well MW10C; the pump controller has been removed for inspection and repair/replacement. The controller for the pump from MW56 was repaired, and pumping from MW56 was resumed on October 15.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizer 2 (thermox 2). Last week, MWH began operation of thermox 1, gradually raising the temperature to 1500°F and introducing clean air to thermox 1. MWH reported that it began processing vapors from the OFCA ISVE system through thermox 1 on October 13. Intermittently, thermox 1 failed to operate because of flame failure. The unit was restarted and operated until the next flame failure.

Ryan and Austgen were onsite October 14 to modify the ISVE influent piping in the GWTP such that vapors from the ONCA SBPA ISVE system could be directed to thermox 1, thereby freeing up capacity

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in thermox 2 to process the additional OFCA ISVE system vapor flow to be generated by the OFCA auxiliary blower.

The OFCA ISVE system continues to operate with 14 wells. Austgen continued electrical and control wiring of the OFCA auxiliary blower, which is approximately 99% complete. MWH plans to conduct startup testing of the auxiliary blower system next week. The ONCA SBPA ISVE system continues to operate with a different group of 12 wells that may produce more vapors than the previous group.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to complete expansion and start the OFCA ISVE auxiliary blower system.
- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing and stripping of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to conduct past-application sampling of soil and groundwater in the offsite chemox treatment area.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area (to begin on November 1).
- MWH to contact local resident regarding "whining" noise from the treatment system.
- EPA and MWH to conduct public meeting regarding construction completion on October 20.

Signature:	Larry Campbell	Date: <u>October 20, 2004</u>
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Weekly Oversight Summary Report No. 190 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of October 18, 2004.

BVSPC O/S Dates: October 20, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	5	Respondent's General Contractor
U.S. Environmental Protection Agency	1	Federal Regulatory Agency
Indiana Department of Environmental Management	2	State Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Walsh & Kelly	2	Asphalt Contractor
Post Tribune	2	Newspaper Reporter and Photographer
General Public	8	Interested Persons

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Walsh & Kelly completed stripping of the roadway across the Still Bottoms Pond Area final cover
- Montgomery Watson Harza and U.S. Environmental Protection Agency conducted a public meeting at the site on October 20 to celebrate completion of construction of the remedial action elements.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. The GWTP was shut down periodically for routine maintenance. Because of problems with the pump controller, groundwater is not currently being pumped and treated from extraction well MW10C; the pump controller has been removed for inspection and repair/replacement.

Weekly OSR No. 190

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were processed through thermal oxidizer 1 (thermox 1) and those from the OFCA ISVE system. through thermox 2.

The OFCA ISVE system continues to operate with 14 wells. Austgen is awaiting arrival of explosion proof relays for the OFCA auxiliary blower, which is approximately 99% complete. MWH plans to conduct startup testing of the auxiliary blower system as soon as the relays are installed. The ONCA SBPA ISVE system continues to operate with a different group of 12 wells that may produce more vapors than the previous group.

MWH reported that Walsh & Kelly was onsite October 21 to paint yellow stripping on the SBPA final asphalt cover to delineate the truck route across the final cover.

MWH and U.S. Environmental Protection Agency conducted a public meeting at the site on October 20 from 3 to 5 PM to celebrate completion of construction of the physical elements of the remedial action. Members of the general public and newspaper media met at the Griffith City Hall and were transported by bus to the GWTP at the ACS site. Kevin Adler (EPA) and Peter Vagt (MWH) presented a summary of the ACS site history and described the resulting contamination at the site and the remedial actions constructed and implemented to cleanup such contamination. The public was given a descriptive tour of the GWTP and the wetlands pond and was then transported via bus to the OFCA to view the OFCA ISVE blower shed. At the conclusion of the meeting, the public were transported back to City Hall.

Black & Veatch Special Project Corp. attended the public meeting at the site on October 20.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to complete expansion and start the OFCA ISVE auxiliary blower system.
- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to conduct past-application sampling of soil and groundwater in the offsite chemox treatment area.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area (to begin on November 1).

Page 2 Weekly OSR No. 190

•	MWH to contact local resident reg	garding "whining" noise from the treatment system.
Signature:	Larry Campbell	Date: October 27, 2004
		t:\projects\acs-raos\osr\2004\10\1018#190.wpa

Weekly Oversight Summary Report No. 191 ACS Superfund Site WA57, 46526.238

Reporting Period: Week of October 25, 2004.

BVSPC O/S Dates: October 25 and 27, 2004 (Mr. Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	2	Respondent's General Contractor
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Ryan Construction	1	General Contractor
PSA Environmental	2	Geoprobe Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant and the in-situ soil vapor extraction systems.
- Montgomery Watson Harza and PSA Environmental conducted past-application sampling in the chemox treatment area.
- Montgomery Watson Harza conducted construction coordination meeting via telephone on October 28.

Activities Performed:

Montgomery Watson Harza (MWH) reported that it continued to operate the groundwater treatment plant (GWTP) at 27 gpm. The GWTP was shut down periodically for routine maintenance. Because of problems with the pump controller, groundwater is not currently being pumped and treated from extraction well MW10C; the pump controller has been removed for inspection and repair/replacement.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems, processing vapors through thermal oxidizers 1 and 2. Vapors from the ONCA SBPA ISVE system were precessed through thermal oxidizer 1 (thermox 1) and those from the OFCA ISVE system were processed through thermox 2.

The OFCA ISVE system continues to operate with 14 wells. Austgen is awaiting arrival of explosion proof relays for the OFCA auxiliary blower, which is approximately 99% complete. MWH plans to conduct startup testing of the auxiliary blower system as soon as the relays are installed. The ONCA SBPA ISVE

system continues to operate with a different group of 12 wells that may produce more vapors than the previous group.

Observed MWH conducting groundwater sampling of existing piezometers and temporary wells in the chemox treatment area on October 25. PSA Environmental mobilized to the site on October 26. MWH reported that it and PSA collected groundwater samples at additional locations in the chemox injection area on October 26. Observed MWH and PSA collect soil samples at additional locations on October 27. PSA demobilized from the site on October 27.

Montgomery Watson Harza conducted the construction coordination meeting via telephone on October 28.

Black & Veatch Special Project Corp. personnel attended the MWH construction coordination meeting via telephone on October 28.

Topics of Concern: None.

Concern Resolution: None.

Upcoming Activities:

- MWH to complete expansion and start the OFCA ISVE auxiliary blower system.
- MWH to continue proving out the ONCA SBPA ISVE system wells.
- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE systems.
- MWH to assess results of final laboratory testing of cores of the SBPA final asphalt cover.
- MWH to complete fencing of the SBPA final cover.
- MWH to collect additional soil gas samples to assess possible soil vapor intrusion into the house basement resulting from the smear zone in the South Area plume.
- MWH to investigate benzene levels in the lower aquifer in the wetlands area (to begin on November 1).
- MWH to contact local resident regarding "whining" noise from the treatment system.

Signature:	Larry Campbell	Date: <u>November 4, 2004</u>
		t:\projects\acs-raos\osr\2004\10\1025#191.wpd

Page 2

TO: 3123464781

WEEKLY CONSTRUCTION MEETING MINUTES FOR OCTOBER 28, 2004 MEETING AMERICAN CHEMICAL SERVICE, NPL SITE GRIFFITH, INDIANA

MEITING DATE:

Thursday, October 28, 2004

MEITING TIME:

10:00 AM

MENTING LOCATION: MWH Chicago Office

ATTENDEES:

Kevin Adler – U.S. EPA (via telephone)

Larry Campbell - BVSPC (via telephone)

Rob Adams – MWH Amy Clore – MWH Chris Daly - MWH

Matthew Mesarch - MWH

Jon Pohl - MWH Chad Smith - MWH Peter Vagt - MWH

NOTE: The next Construction Meeting is scheduled for 3 weeks out on Thursday November 18, 2004 at 10 a.m. There will be NO meeting November 11th.

TOFICS

Health and Safety Summary

There have been no health and safety issues since the last meeting on October 7th.

Augsten Electric, Walsh and Kelly, and PSA were on site in the past three weeks and had no health and safety incidents.

Groundwater Treatment Plant (GWTP) Status

The GWTP is presently operating at 27 gallons per minute (gpm). No issues have arisen regarding the GWTP since the last construction meeting on October 7th.

The pump in extraction well MW 56 was brought back online on October 15th. Extraction well MW 10C still remains offline.

Off-lite Area/SBPA ISVE Systems

Ther nal Oxidizer/Scrubber Unit 2 (Therm Ox 2) is currently running normally and has had no issues during the past three weeks.

Ther hal Oxidizer/Scrubber Unit 1 (Therm Ox 1) went down October 13th due to a flame failure in the ignition part of the burner. The problem was fixed and the unit was brought back online the same day.

Construction Meeting Minutes_

November 2, 2004

ACS NPL Site

October 28, 2004 Meeting

Page 1

The Off-Site ISVE system is currently running and Augsten is waiting for the delivery of parts to finalize the electrical and control wiring for the ISVE expansion equipment. Explosion-proof relays for the system are scheduled to be delivered the week of November 1st. The electrical wiring is anticipated to be complete during that same week. MWH will conduct start-up testing of the blower system upgrades once the wiring is complete.

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The Still Bottoms Pond Area (SBPA) ISVE system is currently running normally.

SBP & Final Cover

MWII is currently waiting for the construction completion documentation summarizing the SBPA final cover to be submitted by Walsh and Kelly. The Construction Completion Report (CCI) for the SBPA cover will be completed when the information is received.

Walsh and Kelly was at the ACS site during the week of October 11 to demarcate the truck route and flarking area with high visibility paint on the new asphalt SBPA cover. The curbs that were placed around the catch basins were inspected during recent thunderstorms and found to be functioning adequately in diverting run-off toward the catch basins. MWH is working with the contractor to improve the aesthetics of the curbs.

Chemical Oxidation Application

The second round of chemical oxidation (chem ox) post-application sampling was conducted between October 25th and 27th. Soil and groundwater samples were collected at eight locations across the application grid. MWH is currently waiting on the lab results to be returned.

MW|I has provided the results of the soil gas samples taken near the resident at the intersection of Chifax and Reder Rd, and the proposed plan of action to the ACS PRP group for approval. Upor approval, the plan will be forwarded to U.S. EPA and IDEM for review, comment, and apprijval.

Groundwater and Residential Well Sampling

The invalidated laboratory results of the 24th round of groundwater sampling and residential well sampling have been returned to MWH. The results are currently being validated and are expected to be returned to MWH in approximately two weeks.

Lowlin Aquifer Investigation

Invelligation of the lower aquifer is scheduled to begin on November 1st. The investigation will focul on an array near well 10WC. The investigation is expected to be completed within two weels.

Construction Meeting Minutes

November 2, 2004 Page 2

ACS NPL Site

October 28, 2004 Meeting

Construction Meeting Minutes
October 28, 2004 Meeting

November 2, 2004

ACS NPL Site

Showing Mishled how Knowest tank between Thermox I New heat exchanger (L) and oursting Chem Oxedrzer, (R) 1039 Plate 67-201 Cooping NE at thermany 1 Gir port / value being repaired by Austran 645 Disc. up Lee Cross. Changed at darbon yesterday, Let equalibrate overnight. Starting recirculation make feeling, After pH normaligues cold rostort GWTP.

- Loc Chekry out controlles for Granites panys in Must & ICC 1655 Disc by that dang. Ples well 163 Phate 67-20 Traking Nice at Completed themas injection listotions in

Yard at 1602 Reday RA. Note dark 110-1 Photo 67-27 Looking NE at Change

Injection prints in boutonite at Surface

11/2 Plute 67-22 Lovery N'W at

Persaide tunker Offer Charles injected apple

1115 LItSik la Day

My Campbell

(7) 25 Sept 09 Ofice ifrom on site. Overcest Calm, Cool 58 F yersonnel Consite Kich McCarroll MINH Les Cross Li Tim Ktykland Austgan Chied Smith Mist Hinly Clare Carry Canapholy Bisk

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observed to Austyan wiring or CTK Thomas I had exclusive blown

Phih 67-Ik Cooking E at 102 Compreher SBPA asphalt Court

Plup 67-27 Lections W cot 1631 Marsh and pendi Note west ahre en pars en N 5,26 1 pond

1032 Plaste 67-18 Locking Wh Showing Exhaust from the mix 2 -

back in operation 1037 Pluh 67-19 Locking NW

Dy Musher

700104 OGIO Arm onsk - Partly Cloudy TOFF Personnel Maste La Oresz Will 4 Rich McCarrell MOUST Durine Thes 1300 Thus tgin Mille larger Tim Kirkland Rehest Cof BUSK Larry Campbell 0420 Disc. in hec. Austgan personnel are weaking on software to loving Thermax I buck culture. 0930 Lott 5.te for day because of family medical energency 1000 CONSTRUCTION Could Mity Affer dres, Lec Ousz & Kich McCarrell - Site Pek Vait, Reb Haams, Chad Smith, Amy Close - Muit office Ken n Arla, Marie Travers & Larry Chapbell - Phone 448 -Ne 195403 Since last Mitgi Granular activities Carter (640) Im Campbery

Was Changed out - GAC Personnel had there all appropriat PPE. GWIT - Running at 27 gpm. GAC was changed out on 9/27/04. GWTP then operated in recirculation made on 9/28 to remove GAC fines of returnal to operation in 9/29/84. All occass Salfavic acid & tomporony holding touter have been stripped off-site prev. work. Thermox 2 - Now pedeing material was ordered finstalled on 10/4/04. Unit restartal 10/5 of running well. Thermox Mechanical felectrical Connections are complete and system began starting procedures on 10/5/04. Temperature has been gradully rising to operational level. of 1500°F. Expect to introduce clean atir to ton 54sters on Friday. Will then begin operations of with vapors soon. MWH will document changes in the quarterly report 1 active treatment systems fwill update the Of M Manual. OFCA ISVE 15 Working Hustgen is completing The electrical of control wiring - expected Completion is 10/11/14 - of auxillary blower. In aughor

Mult expects to start up the auxillors blower unit next week.

ONCA ISVE Syfom is running OK 5BPA Final Cover - Walsh + Kelly consite 10/6 to fitt in joints on 5BPA final cover. Walk will return to Install Stormwater diversion curbs, place asphalt around Catch basins of paint traffic lines on cover.

Austral method to delinate heavy trake areas to be visible in winter under snow land, trans.

Chemox application was completed sot.

Sept 25. Instiller 388 points, 8

More than scheduled. Schoon fractor demobilized from site on 9/25/c4.

Hydrogen perofice tank was removed to day 10/7/04. Must will legair daman he soil in yard next wook.

Soil Gas sample results received. Results
Indicated possible natural gas lookconfirmed by Utility company,
Chem ox Follow up sampling will be conducted
last week of Oct

Im Campbell

40/ Sampling was completed on Mon.

Residented Well Sampling - Conslucted on

Mont Fur 9/27 of 9/28/04. One residential

Well Could not be sampled because the

resident had Taped faucat short. Must

Made man, varred attents to contact

vesident - but was not successful.

At request of anothe resident, Must

Samples Well at that alternate (see tion.

Lower Aguilor lurestyphian - 13 Schedalor to Begin on Nov. 1 and May take 2 weeks

Public Morning - EPA, MWH & PRPS Will hols a public my on Oct 20 from 3-5 pm.

LOOK Ahead Schedul

- Complete OFCA ISVE Q axilliary blower system
- Start up 1. 1-
- Operate GWTP & 15UE systems
- Complete Starter of Thermor !
- Complete SBPA Final Cover finishing Work
- Conduct Pablic My
- Vext Mtg Thur Oct 2/12004 @ 10 AM

In Campbell

Vapors to Thormor | So OFCA ISVE Napers can be directed to Thermer Z.

1015 Photo 68-04 Looking W Showing New asphalt Burb on 5 edge 1 SBPA COVER near Central Storm drain

1016 Photo 68-05 Looking W showing New asphalt Curb on 3 edge 1 SBPA Cour near Western Sterm drain Note opening in Carb for Off-Cap Influent water from RR track area

1020 Pheto 68-06 Lacking NE Showing asphalt apron placed outside SBPA Cover near NEV Sterm drain

1022 Photo 68-07 Looking NE at new asphalt Curb placed on N Sike of SBPA COUR War Mitale Sterm drain

1028 Phato 68-08 Louking & E Showing asphalt Scaling of Cracks where asphalt paving abuther concrete pads

240 Photo 65-05 becking into CFOT 1506 electrical show showing auxiliang. blower controller (4) and now cor Spage promp + some tor (12) In Complee

(EC) 14 Cit of Caco Armi ensite - Overcasi Cool Sit Stight broose personnel consite Let Orosz mun Dunga Austran Austres ... Trong Frisk Pyan Tim Kirkland Hustgen Lam, Campbell BUSK : Kerih Falvey Microbac ...

0925 Distussion un Lee regarding apcoming public Marking . Callad Yele Vast to discuss. Pete is planning short Power fint presentition of aust achieves at the Bldg, Followed by bus trip to site.

0945 Photo 68-01 Co-King E at 58PA final cover showing asphalt Curb on perimeter to direct Stormwater runoff to draing

0946 Photo 68-02 Looking INW Showing exhaust from both Thermox 1 4 Z.

0949 Photo 68-03 Leoleing NE at Slyan preparity to instill by post in vapor piping to direct ONCA ISVE

Freemodel

20 Oct 04 (Public M/g) Disc, we hee 1420 Arrive onsite - Overcast - walsh d Kelly onsite 10/8 to instill Calm Cool 52/ asphalt eurbs at edges 1 SBPA Personnel onsile Final asphalt cover work don Lee Ovosa MWH in dr. 33le. Some locations the Anny Clare back of cumbbed of lost Matt Mesarch shope. WAK also sealed crack/ Bustgen Palit Cox Joint between as pholt and Robot Hams Must 1DEM Concrete pals Probhater - Last were MUH started Thornor) Keein Adler EPot and gotitup to temporature. Kept Pete Vagt MUH in hot idle over weakend Started Larry Campheil BUSH Post Tribung processing vapers thry unit a Michelle Huinn 10/13/04. Ruth Schaller - Austran is onsite completing John Ham Holmes electrical connections at OFEA Brook Shreve ouxiliary blower. Should be David Miller Herde Silva ready horm by next wk DEM - Ryan Mustyan on site to day to Rick Murller JeB modity so menited so ONCA Norma, David, Sweph Dra pac 1730 Photo 68-10 losting sw at 15VE vapors can be trastel in Thermore L. & personnel at public Mie ting 1100 Left site he day 1431 Phon 68-11 Same as Phone 68-11 1832 Philo 68-12 looking # SE at personnel at public nity Im Campbell In Campbell

1630 Pheto 65-13 Laving No at her cross doser hivey pour in we Harris 1.535 Pek Vagt Presented Strace Show of description of problems /history of site, the Investigation + remody and Subsequent Ret construction 16 ic Los Erroz describer terr of treatment plant and 1500 System. 1115 Wished Welkend pend Tock personnel on hers to visit 1640 OFCA 150E System 1710 Tock Visitors by bus buck to City bull 1721 Lett 5th for day Manyha 21CCTC4 Cens muchin my Confi Call reschalated to 2800 TOY My Campbell

25 CUT 04 1200 Arrive On Site - Clear Streht word, Cost 10% forsonn/ on site TIME IVELLEN Austran Terry Frisk Ryan Must Malt Mesarch Ched Smith Mut Larry Campbell BUSPC 1252 Disc up chal Smith - Mais nas completed sampling 2 Temp. well in Cherry a area. Will Sungel More thing PM. But-1430 Recorded Munt Hes 1=ports 1430 Objerved Mun Collect Ger Strape from Tong. well TWO3 on Kenter Rd. 1432 Plate 68-14 SHE LONE IN at MWH Sampling TWO3 1500 Must crow ampletes sampling a TWO3 and mores to PZ 165 1505 Photo 68-15 Lovens SECONT must taking water level at PZ 105 1555 Philo 68-16 Lacking 5 at In amplier

27 OCT 64 Must Lilling VOC Viel Sample 1115 Arrive on site - Clear Calm 100/ 62°F from PZ 105 605 Rekenn to trailer of rousen Personnel austo MWH Acs Reports Watt Mosarch Muil 1645 houre sit Inday Chad Smith Must PSA Enul. Jaka Botlor Auran Butter 11 Austych Tim Kirkland Larry Campbell BUSPC 1120 Disc. us chad sonith MWH + PSA ample to of now grand-Wither probe sumpling in chamax treatment area yesterday Terday are Collecting Soil Sumples in Chemox treatment aven. Completed 3 Soil probe Sumpling today will Complet 2 more later today, - Tru Kilkland is clearing louten in wellands for lower aqueto invest. to start next Works 1135 Photo 68 17 Locking NE at Mew Vaper piping arrange wont to allow Attite vapors to be freated in Thermex In anyther

The Completed 1304 Phets 68-36 Lealchy N cet in are where lift had been stored Get Breeze green grant Agas Asias 10 N Surno7 58 89 HML 1561 20210 PSA edecenanty sempling 12 N 34 COCKINE N 24 Je who for examination sight stropping tobe to expect Men 63-23 County S et Phil -£7.81 Cide conciery Seniples of PAZ-DLAS USA 43 5 34.700) 22-89 247/ 6171 7.0- 2 +18 men 1:05 12-11:215 ment (1616 Acher 521 100 100 Mate 68 21 Locking 24 Mach Cast 5 nl '55-191 + 2 puintate and 30-24 (fat) Not bleck (1001), 2-91 men 570hing 1130 12-87 12-80 Lecuing down of 1001 50:11 than @ 24! Environ tied primare 20-240 160 to 68-19 Course 1 3 was C 20 de 16 on 6 500, Cellez let 25- 2 All most breakers inquise 11.2 86. 86 68-18 Losloung 5 ct

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2800T 04 Construction Mrs Nates Via Telephone - no one of site Personnel in Gull USEN Kum Adler LM Campbell BUSPE Pete Wagt mulest Rob Adams Chad Smith Matt Mesorch Chris Daly Jon Robil Amy Chire 1+15 - No issues since last Asta GWTP - running at 27 spm -ne preblas 15ve but onch SAPA & CECA systems are exercting well

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Systems are exercising well

processing them bethe Therman 192

CIECA auxiliary blower withing

M special electoral parts.

SBOAT France Cree - washing of reading

Complete Striping of reading

Soil Gag - because of paterns gar

Vente, will probably head to

The Complete Striping of reading

Vesample sel que near l'estance et 1002 Reder Rd. Propost being reviewed by Pargroup. Chamby - PAFaul & Must conducte

post application soil & tow Sampling in about it treatment are on oct 25-27.

but must be validated

LOOK These

- Lower Aguitan investigation shets
next week on Nov. 1

- Soil gas iesample

- 64m GWTP dishe systemy

Next My in 3 cas on hours 18 10mg

like My over

English Committee of the Committee of th





Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 67 Photo #20 Date: 09-28-04 Time: 1030

Photographer: Larry Campbell

Description: Photo facing east showing completed SBPA

asphalt concrete final cover.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 67

Photo #21

Date: 09-28-04

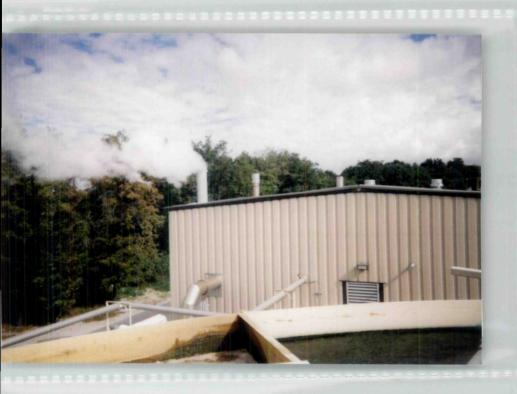
Time: 1031

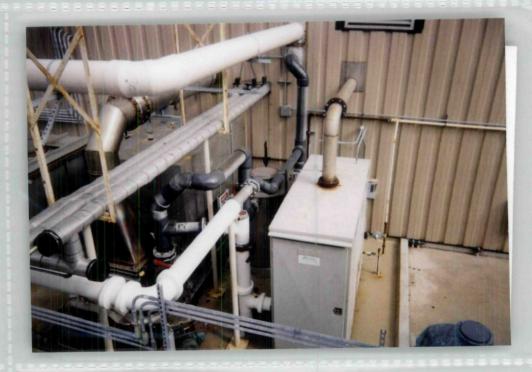
Photographer: Larry Campbell

Description: Photo facing west showing marsh area

pond. Note wood chips on path on north

side of pond.





Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 67 Photo #22 Date: 09-28-04 Time: 1032

Photographer: Larry Campbell

Description: Photo facing northwest showing exhaust

from thermox 2 after it was returned to operation following cleanout of packing

material and acid washing.

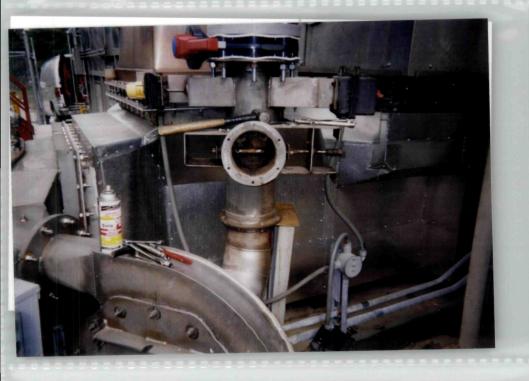
Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 67 Photo #23
Date: 09-28-04 Time: 1037
Photographer: Larry Campbell

Description: Photo facing northwest showing newly

installed knockout tank between thermox 1 (L) and existing chemical oxidizer (R).





46526 Proj. #:

Photo #24 Roll: 67 Time: 1039 Date: 09-28-04

Photographer: Larry Campbell

Description: Photo facing northwest showing thermox 1

air port/valve being repaired by Austgen.

Site: American Chemical Service, Inc.

Proj. #: 46526

Photo #25 Roll: 67 Date: 09-28-04 Time: 1103 Photographer: Larry Campbell

Photo facing northwest showing completed Description:

> chemox injection locations in yard at 1002 Reder Road. Note dark soil placed in areas

disturbed by equipment.





Proj. #: 46526

Roll: 67 Photo #26 Date: 09-28-04 Time: 1104

Photographer: Larry Campbell

Description: Photo facing northeast showing chemox

injection points with bentonite at the surface.

Site: American Chemical Service, Inc.

46526 Proj. #:

Photo #27 Roll: 67 Time: 1112 Date: 09-28-04 Photographer: Larry Campbell

Description: Photo facing northwest at ISOTEC

peroxide tank after completion of first round

of chemox injections.





Proj. #: 46526

Roll: 68 Photo #1 Date: 10-14-04 Time: 0945

Photographer: Larry Campbell

Description: Photo facing east showing asphalt curb on

perimeter of SBPA final cover to direct

stormwater runoff to drains.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 68 Photo #2
Date: 10-14-04 Time: 0946
Photographer: Larry Campbell

Description: Photo facing northwest showing exhaust

from both thermox 1 and 2.





Proj. #: 46526

Roll: 68 Photo #3 Date: 10-14-04 Time: 0949 Photographer: Larry Campbell

Description: Photo facing northeast in GWTP showing

Ryan preparing to install bypass in piping so SBPA ISVE vapors could be directed to

thermox 1.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 68 Photo #4 Date: 10-14-04 Time: 1015 Photographer: Larry Campbell

Description: Photo facing west showing new asphalt curb on south edge of SBPA final cover near

central storm drain.





Proj. #: 46526

Roll: 68 Photo #5 Date: 10-14-04 Time: 1016

Photographer: Larry Campbell

Description: Photo facing west showing new asphalt curb

on south edge of SBPA cover near western storm drain. Note opening in curb so runoff from railroad track can access the drain.

Site: American Chemical Service, Inc.

Proj. #:

46526

Roll: 68

Photo #6

Date: 10-14-04

Time: 1020

Photographer: Larry Campbell

Description: Photo facing northeast showing asphalt

apron placed outside SBPA cover near

northwest storm drain.





Proj. #: 46526

Roll: 68 Photo #7
Date: 10-14-04 Time: 1022
Photographer: Larry Campbell

Description: Photo facing northeast showing new asphalt

curb on north side of SBPA final cover near

middle storm drain.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 68 Photo #8
Date: 10-14-04 Time: 1028
Photographer: Larry Campbell

Description: Photo facing east showing asphalt sealant in

crack between asphalt cover and concrete

well pads.





Proj. #: 46526 Roll: 68 Photo #9

Date: 10-14-04 Time: 1040

Photographer: Larry Campbell

Description: Photo facing south into OFCA ISVE

blower shed electrical room showing new auxiliary blower controller (L) and new air

9

sparge pump and motor (R).

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 68 Photo #10
Date: 10-20-04 Time: 1530

Photographer: Larry Campbell Description: Photo facing sout

Photo facing southwest showing personnel attending the public meeting to celebrate completion of construction of remedial

10

action elements.





Proj. #:

46526

Roll: 68

Photo #11

Date: 10-20-04

Time: 1531

Photographer: Larry Campbell

Description: Photo facing southwest showing personnel

attending the public meeting to celebrate

completion of construction of remedial

action elements.

American Chemical Service, Inc. Site:

Proj. #:

46526

Roll: 68

Photo #12

Date: 10-20-04

Time: 1532

Photographer: Larry Campbell

Description: Photo facing southeast showing personnel

attending the public meeting to celebrate completion of construction of remedial

action elements.





Proj. #: 46526

Roll: 68 Photo #13 Date: 10-20-04 Time: 1630

Photographer: Larry Campbell

Description: Photo facing northeast showing Lee Orosz

describing the wetlands pond at the public

meeting.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 68 Photo #14
Date: 10-25-04 Time: 1432
Photographer: Larry Campbell

Description: Photo facing north showing Chad Smith

sampling temporary well TW03 in off-site

chemox treatment area.





Proj. #: 46526

Roll: 68 Photo #15 Time: 1505 Date: 10-25-04 Photographer: Larry Campbell

Description: Photo facing southeast showing Matt

Mesarch taking water level reading at PZ 105 in off-site chemox treatment area.

Site: American Chemical Service, Inc. Proj. #:

46526

Roll: 68 Photo #16 Date: 10-25-04 Time: 1555 Photographer: Larry Campbell

Description: Photo facing south showing MWH

personnel collecting VOC sample at PZ105 in off-site thermox treatment area..





Proj. #: 46526

Roll: 68 Photo #17 Date: 10-27-04 Time: 1135

Photographer: Larry Campbell

Description: Photo facing northeast showing new vapor

piping arrangement to allow ONCA SBPA ISVE vapors to be treated in thermox 1.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 68 Photo #18
Date: 10-27-04 Time: 1156
Photographer: Larry Campbell

Description: Photo facing south showing soil sample

recovered from PA2-02 @ 20' depth on east side of Colfax Road in chemox

treatment area.





Proj. #: 46526

Roll: 68 Photo #19
Date: 10-27-04 Time: 1159
Photographer: Larry Campbell

Description: Photo facing north showing PSA crew

removing soil sampling tube from 24' depth at PA2-02 in off-site chemox treatment

area.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 68 Photo #20 Date: 10-27-04 Time: 1201 Photographer: Larry Campbell

Description: Photo facing down at soil samples from 16-

20' (near) and 20-24' (far). Note black

staining at 19-22' in the two tubes.





Proj. #:

46526

Roll: 68

Photo #21

Date: 10-27-04

Time: 1207

Photographer: Larry Campbell

Description: Photo facing down showing MWH

collecting VOC and other samples from stained soil from PA2-02 in off-site chemox

treatment area.

Site: American Chemical Service, Inc.

Proj. #:

46526

Roll: 68

Photo #22

Date: 10-27-04

Time: 1219

Photographer: Larry Campbell

Description: Photo facing south showing PSA advancing

sampler at PA2-DL03 in off-site chemox

treatment area.





Proj. #: 46526

Roll: 68 Photo #23
Date: 10-27-04 Time: 1227
Photographer: Larry Campbell

Description: Photo facing south showing PSA slitting

sampling tube to expose soil sample from

PA2-DL03 for examination.

Site: American Chemical Service, Inc.

Proj. #: 46526

Roll: 68 Photo #24 Date: 10-27-04 Time: 1245 Photographer: Larry Campbell

Description: Photo facing north showing PSA deconning

sampling probe in off-site chemox treatment

area.





Proj. #:

46526

Roll: 68

Photo #25

Date: 10-27-04

Time: 1251

Photographer: Larry Campbell

Description:

Photo facing north showing growth of grass

in area of OFCA cover where logs had

been stored.

Site: American Chemical Service, Inc.

Proj. #:

46526

Roll: 68

Photo #26

Date: 10-27-04

Time: 1304

Photographer: Larry Campbell

Description: Photo facing north showing Austgen clearing

brush and shrubs in wetland in area of lower

aquifer investigation borings.



Proj. #: 46526

Roll: 66 Photo #27
Date: 10-27-04 Time: 1310

Photographer: Larry Campbell

Description: Photo facing northeast at staked locations of

lower aquifer borings in wetlands.